- 1 A Monticello was being translated by the facility.
- 2 Q So let's be clear. Let's say -- we will go back
- 3 to December of 1994 once again, the way we were discussing a
- 4 minute ago.
  - 5 A Okay.
  - 6 Q Okay?
  - 7 If the Fort Lee translator is receiving Jukebox
- 8 Radio programming off the air directly from the transmission
- 9 of the Monticello station, what would the indicator lights
- 10 show --
- 11 A None.
- 12 Q -- on the TC-8 unit in Dumont?
- 13 A None.
- 14 Q No, tell me every indicator light.
- 15 A Oh, light number one would be lit. I apologize.
- 16 Light number one would be lit to be showing that the main
- transmitter is on the air, and there would be no other light
- 18 lit on the unit, Your Honor.
- 19 Q Okay. How about -- now let's move on to channels,
- 20 the LAD readout. What channels -- remember, you walked us
- 21 through some explanation of channels --
- 22 A Yes.
- 23 Q -- when we were doing the Monticello
- 24 demonstration?
- 25 A Yes.

- 1 Q Do you have any memory of what channels did, what
- you would do with different channel numbers?
- 3 A Channel number one would turn the main transmitter
- on and off. After that, I don't remember exactly -- we've
- 5 never really ever had to use the auxiliary transmitter
- there, so I really can't remember the exact function of
- 7 turning the auxiliary transmitter on and off. It may have
- been channel two, three or four. i really don't remember.
- 9 Channel five would allow you to flip audio, or
- inputs to the translator for either Pomona or Monticello,
- and channel six would enable you to use the microwave unit.
- 12 Channel seven didn't have any function, and channel eight
- 13 didn't have any function.
- 14 Q Okay.
- JUDGE STEINBERG: What was six again?
- 16 THE WITNESS: I have to start over.
- 17 MR. RILEY: You said something about microwave.
- 18 THE WITNESS: I'm sorry. Channel six would allow
- 19 you to put the microwave on.
- BY MR. NAFTALIN:
- Q Okay, Mr. Turro, is there anything else you can
- think of that you need to tell us about these TC-8s?
- 23 A That's about it in a nutshell.
- JUDGE STEINBERG: Okay, the main transmitter, I
- 25 think you said this before, in Dumont, the TC-8 unit in

- 1 Dumont that was hooked up with Fort Lee could not adjust the
- 2 power of the Fort Lee translator?
- 3 THE WITNESS: Never.
- 4 JUDGE STEINBERG: Is it the same -- you explained
- 5 this morning why you couldn't do that in Monticello. Is the
- 6 reason you couldn't do that in Fort Lee the same?
- 7 THE WITNESS: Yes.
- 8 JUDGE STEINBERG: If the Fort Lee translator was
- 9 translating Pomona, the number five status light would be
- 10 lit?
- 11 THE WITNESS: Yes.
- JUDGE STEINBERG: And if the main transmitter was
- on the air, the number one status light would also be lit?
- 14 THE WITNESS: Yes.
- JUDGE STEINBERG: So there would be two lights
- 16 lit?
- 17 THE WITNESS: Yes.
- JUDGE STEINBERG: At the same time?
- 19 THE WITNESS: Yes.
- MR. NAFTALIN: May I ask one somewhat unrelated
- 21 matter?
- BY MR. NAFTALIN:
- 23 Q Mr. Turro, let me put in front of you Turro
- Exhibit No. 29, which has previously been admitted. If you
- want to sit down, that would be great.

- 1 A I'm comfortable standing.
- Q Well, come near a microphone. I don't care where
- 3 you are.
- A All right. I've been sitting for eight days.
- 5 Q Do you recognize what's in the picture in Turro
- 6 Exhibit No. 29?
- 7 A Yes, I do.
- 8 O What is this?
- 9 A This is a satellite receiving dish to receive
- 10 network audio from the ABC direction network.
- 11 Q Is this -- where is this dish located?
- 12 A It's located on the building adjacent to the
- 13 Jukebox Radio studios.
- 14 Q Are there any other dishes or antennas similar in
- any way to that either on the roof of the Dumont studio or
- on the roofs somewhere near the Dumont studio that you know
- 17 of?
- 18 A None.
- 19 Q Okay. Has this dish that you look at in Turro
- 20 Exhibit No. 29, does that have transmission ability?
- 21 A No, and I don't think it could.
- Q Has it ever had transmission ability?
- 23 A No.
- Q It has at all times been a receive only dish?
- 25 A Strictly.

- 1 Q Okay.
- JUDGE STEINBERG: How big in diameter is it?
- 3 THE WITNESS: Ten to 12 feet.
- 4 MR. NAFTALIN: Your Honor, I think we are done
- 5 with direct at this point.
- JUDGE STEINBERG: Does anybody have any questions
- 7 concerning Chart 2 and the second demonstration?
- 8 Do you want to take some time?
- 9 MR. ARONOWITZ: Yes, I would like -- we would like
- 10 to take some time, but I would -- I would like to take some
- 11 time.
- JUDGE STEINBERG: Okay, let's go off the record
- and you can take some time.
- Why don't you take pictures of that second set up,
- 15 too.
- MR. NAFTALIN: Terrific.
- 17 THE COURT REPORTER: Off the record?
- JUDGE STEINBERG: Yes, off the record.
- (Whereupon, a recess was taken.)
- JUDGE STEINBERG: We're on the record now, and,
- Ms. Friedman -- well, it's a quarter after one now, and how
- long have we broken for, about 25 minutes, and Ms. Friedman,
- 23 why don't you -- now, apparently the Bureau and Universal
- 24 are not anywhere near ready to ask whatever questions they
- 25 have?

- MS. FRIEDMAN: No, they are not, Your Honor.
- JUDGE STEINBERG: Okay. And you request that we
- 3 have a luncheon break now?
- 4 MS. FRIEDMAN: Yes.
- 5 JUDGE STEINBERG: Okay, I will grant the request
- 6 and we will have a luncheon break now. We will break for an
- 7 hour, so we will be back here at 2:15.
- At 2:15, I will expect to -- we will have whatever
- 9 questions there are for Mr. Turro -- we will begin with
- 10 whatever questions there are for Mr. Turro on the last
- demonstration, and we will go right into cross-examination
- 12 and there won't be any further breaks for -
- MS. FRIEDMAN: Okay.
- JUDGE STEINBERG: There won't be any breaks for
- the purpose of huddling up to formulate questioning.
- MR. NAFTALIN: What will be Mr. Luna's role after
- 17 that?
- 18 JUDGE STEINBERG: I don't know. We can discuss
- 19 that after --
- MR. NAFTALIN: My understanding was he would have
- 21 to -- if the Bureau seeks to put him on as a rebuttal
- 22 witness, and we don't know the answer to that yet.
- JUDGE STEINBERG: Right.
- MR. NAFTALIN: They may not. If they do, wouldn't
- 25 it be necessary for him to get on the stand immediately

- 1 after Mr. Turro's examination on this subject?
- JUDGE STEINBERG: I think we will hold off Mr.
- 3 Luna. If they want to put on Mr. Luna, we will have him put
- 4 on after the two engineers.
- 5 MR. NAFTALIN: But he would be excluded from the
- 6 room for the rest of --
- JUDGE STEINBERG: Yes, he would be excluded. Once
- 8 the cross-examination is finished on the last
- 9 demonstration, then he is on his own.
- MS. FRIEDMAN: Your Honor, just so I understand,
- 11 so after the Bureau and Universal do their cross-examination
- 12 this afternoon, Mr. Luna --
- JUDGE STEINBERG: Mr. Luna will be excused.
- MS. FRIEDMAN: Will be excused.
- JUDGE STEINBERG: And then he will still be under
- the sequestration. I want to make it clear that he will
- 17 still be under the sequestration where he can't talk to
- anybody but counsel about anything he has heard. And if
- he's going to be presented as a rebuttal witness, he should
- 20 be ready to go after, I guess, Mr. Hidle second or Mr.
- 21 Hurst?
- MR. NAFTALIN: Mr. Hidle will be second.
- JUDGE STEINBERG: Then immediately after Mr. Hidle
- 24 is finished, and then if there is any rebuttal to be --
- 25 surrebuttal, whatever we call it, then the Bureau and

- 1 Universal will be ready immediately at that point to put
- 2 that on.
- 3 MR. NAFTALIN: Your Honor, let me just for the
- 4 record express our great concern for the impropriety of
- 5 having a fact witness closeted with a whole group of people
- from the other side, potentially having his testimony
- 7 influenced.
- JUDGE STEINBERG: Well, that's the way they would
- 9 prepare their rebuttal anyway, so what difference does it
- 10 make?
- MR. NAFTALIN: Okay, I felt it necessary --
- JUDGE STEINBERG: I don't know if I fully
- explained this on the record yesterday when we were talking
- about Mr. Luna. He is the only one in this room, other than
- Mr. Turro, who knows anything about the equipment in Dumont.
- Now, he didn't visit Fort Lee, so he doesn't know squat
- 17 about Fort Lee. Squat being a term of art that we lawyers
- 18 use to reflect he knows nothing about what's at Fort Lee.
- 19 And I don't think it's unreasonable to have him in the room
- 20 to observe -- to hear what Mr. Turro has to say, to observe
- 21 the demonstrations, because he may be the only one that
- 22 knows whether things operated any differently, and I just
- 23 think it's fair to the Bureau and Universal to give them
- 24 that assistance.
- 25 MR. NAFTALIN: Thank you, Your Honor.

1659

```
JUDGE STEINBERG: So we will be in recess until
 1
      2:15, and you will convey, Ms. Friedman, at 2:15 the first
 2
      thing we will do is cross-examination on the demonstration,
 3
      and then we will jump immediately -- and then Mr. Luna will
      be excused, and then we will jump immediately into the
 5
      cross-examination of Mr. Turro's direct case, written direct
 6
      case, and then there won't be any breaks for question
 7
 8
      huddling. Okay?
                MS. FRIEDMAN: Okay, I understand.
 9
                MR. NAFTALIN: Thank you, Your Honor.
10
                THE WITNESS:
                               Thank you, Your Honor.
11
                             Thank you, Your Honor.
12
                MR. RILEY:
                (Whereupon, at 1:20 p.m., the hearing was
13
      recessed, to resume at 2:15 p.m., this same day, Wednesday,
14
      December 10, 1997.)
15
      //
16
      11
17
18
      //
      //
19
20
      //
      //
21
22
      //
      //
23
24
      //
25
      //
```

1	AFTERNOON SESSION
2	(1:15 p.m.)
3	JUDGE STEINBERG: Let's go on the record.
4	MR. NAFTALIN: Your Honor, something like five
5	minutes ago a messenger arrived from my office bearing with
6	him supplemental statements from Herman E. Hurst and John E.
7	Hidle, who will be the experts testifying tomorrow. If this
8	is a good time, I would like to propose to identify them for
9	the record and distribute them to counsel.
10	JUDGE STEINBERG: Okay, why don't you do that.
11	MR. NAFTALIN: Okay. First, let me give, Your
12	Honor, the court reporter giving the court reporter an
13	original and one copy of what we propose to identify as
14	Turro Exhibit No. 35, the supplemental statement of Herman
15	E. Hurst, Jr. I would like this identified, and then we
16	would seek to admit it through Mr. Hurst when he testifies.
17	JUDGE STEINBERG: Okay, consists of four pages and
18	the document will be marked for identification as Turro
19	Exhibit 35.
20	(The document referred to was
21	marked for identification as
22	Turro Exhibit No. 35.)
23	MR. NAFTALIN: Thank you, Your Honor.
24	In addition, I am giving the court reporter an
25	original and one copy of what we propose to be Turro
	Heritage Reporting Corporation (202) 628-4888

- 1 Exhibit No. 36, the supplemental statement of John E. Hidle,
- and we would seek to admit this through Mr. Hidle during his
- 3 testimony tomorrow, or whenever it is.
- JUDGE STEINBERG: okay, the document by my count
- 5 has got 10 pages, and it will be marked for identification
- 6 as Turro Exhibit No. 36.
- 7 (The document referred to was
- 8 marked for identification as
- 9 Turro Exhibit No. 36.)
- 10 MR. NAFTALIN: Thank you, Your Honor.
- JUDGE STEINBERG: Okay, who is going first? Who
- 12 his cross-examining first?
- MR. ARONOWITZ: I believe I am, Your Honor.
- JUDGE STEINBERG: Okay.
- 15 MR. ARONOWITZ: This cross-examination, an hour
- 16 can do.
- 17 CROSS-EXAMINATION
- BY MR. ARONOWITZ;
- 19 Q Mr. Turro, with respect to the configuration that
- we see before us, were you the one that configured this
- 21 arrangement?
- A Before us now?
- 23 Q Yes.
- 24 A Yes.
- 25 Q And when you installed this in Fort Lee, were you

- the one who -- between Fort Lee and Dumont, were you the one
- that configured this as it operates between Dumont and Fort
- 3 Lee?
- 4 A Yes.
- 5 Q And has the configuration ever changed over time?
- A Not that I -- you mean electronically? No.
- 7 Q In any way, shape or form.
- 8 A I'm sorry. I apologize. I am wrong.
- 9 Yes, it has changed.
- 10 Q Did you make those changes?
- 11 A Yes.
- 12 Q Did you discuss those changes with anybody?
- 13 A No.
- 14 O Was the TC-8 remote unit as used in Dumont -- I
- 15 think this morning we talked about either the status lights
- or the channel being labeled or otherwise identified?
- 17 A I never said that.
- 18 Q Strike the question.
- 19 The TC-8 remote unit now that is representative of
- 20 the one in Dumont, was there any indication of what the
- 21 status lights if lit would indicate?
- 22 A That question doesn't make any sense.
- 23 Q Is there any way that anybody other than you would
- 24 know what the lights meant?
- 25 A No.

- 1 Q Thank you.
- Is there anybody other than you that would know
- 3 what the channels meant?
- 4 A No.
- 5 O So they weren't identified?
- 6 A No.
- JUDGE STEINBERG: Okay, they weren't identified in
- 8 Dumont on any of the equipment? On any of the TC-8 units?
- 9 THE WITNESS: Your Honor, the Dumont to Fort Lee
- 10 TC-8 remote control was not -- did not have any literature
- 11 with it. The Dumont to Monticello did.
- JUDGE STEINBERG: That's the hanging tag?
- 13 THE WITNESS: Yes, sir.
- 14 BY MR. ARONOWITZ;
- 15 Q When you referred to the hanging tag this morning,
- 16 if one were to go in and look at the hanging tag, could one
- 17 figure out what the lights actually -- what the lights and
- 18 the channels actually represented?
- 19 A On this unit, no.
- 20 Q On the one you referred to this morning --
- JUDGE STEINBERG: Okay, time out. Time out.
- We have two TC-8 units in Dumont, correct?
- THE WITNESS: Yes, sir.
- JUDGE STEINBERG: The hanging tag identified the
- functions of the lights, status lights, and the channel with

1 respect to the TC-8 that was hooked to the Monticello

- 2 transmitter?
- 3 THE WITNESS: Yes, sir.
- JUDGE STEINBERG: What Mr. Aronowitz -- and the
- 5 TC-8 unit that was connected to Fort Lee, the TC-8 at Dumont
- that was connected to Fort Lee had no indication on it or
- 7 near it as to what the status lights meant or what the
- 8 channels meant?
- 9 THE WITNESS: That is correct.
- JUDGE STEINBERG: What Mr. Aronowitz wants to
- 11 know, I think, is if somebody in Dumont could figure out
- what the status lights on the TC-8 unit hooked to Fort Lee
- 13 indicated.
- 14 THE WITNESS: Mr. Aronowitz said that's not what
- 15 he wants.
- JUDGE STEINBERG: That's not what you want?
- MR. ARONOWITZ: No, that will be a good question.
- I have another question. That's not the question, but I
- 19 will have that question eventually.
- THE WITNESS: Okay, Your Honor. I apologize. I
- was watching Mr. Aronowitz and I didn't get the question.
- JUDGE STEINBERG: Okay. Since that's not what you
- 23 want, ask what you want. I will withdraw the question.
- MR. ARONOWITZ: No, no. I want that question.
- BY MR. ARONOWITZ;

- 1 Q Was there any -- I want that question. I want
- that because I wasn't -- I have an additional question but
- 3 that wasn't --
- JUDGE STEINBERG: Well, ask your additional
- 5 question first.
- BY MR. ARONOWITZ;
- 7 O Is there any way that a person in the Dumont
- 8 studio looking at the TC-8 remote connected to the Fort Lee
- 9 translator -- you know which TC-8 remote I'm talking about.
- 10 Is there any way that anybody -- there was any indication
- what the status lights stood for or the channel lights stood
- 12 for?
- 13 A No.
- 14 Q There was no tag?
- 15 A No.
- 16 Q Could somebody then figure out what they meant?
- 17 A No.
- 18 Q Okay. So watching it in operation without the
- identification, they couldn't figure it out?
- 20 A No.
- JUDGE STEINBERG: Was that done on purpose?
- 22 THE WITNESS: Your Honor, the Dumont to Monticello
- is required by FCC rules and regulations to be tagged, so
- that people know how to operate the remote control functions
- for Monticello. That's required by law.

- 1 That is not the case with these units.
- JUDGE STEINBERG: With "these units," you're
- 3 referring to the Fort Lee to Dumont units?
- 4 THE WITNESS: Yes, sir.
- JUDGE STEINBERG: The TC-8s?
- 6 THE WITNESS: Yes, sir.
- JUDGE STEINBERG: Okay, let me establish a ground
- 8 rule. When we're asking Mr. Turro questions from this point
- 9 forward on the TC-8 units, we're talking about the Fort Lee
- to Dumont connection, so we don't have to say that every
- 11 time. If we're not talking about Fort Lee/Dumont as
- 12 represented in Chart 2, we will say it.
- is that clear?
- MR. ARONOWITZ: Fair enough, Your Honor.
- BY MR. ARONOWITZ;
- 16 Q Mr. Turro, the Judge just asked you if there was
- any reason why you didn't have these labeled, and you said
- that the FCC rules don't require it.
- 19 A That is correct.
- 20 Q Okay, that's the sole reason for not labeling
- 21 this?
- 22 A I got to tell you, I never really gave it a lot of
- thought.
- Q Well, would the TC-8 remote unit be used in part
- in the event of an emergency?

- 1 A Yes.
- 2 Q Well, then, how would the operator know what to
- 3 do?
- A Because I wouldn't want the operator switching
- 5 that without my permission and told to do so.
- 6 Q Fair enough.
- 7 I am now going to talk about the microwave signal,
- and I'm not even going to get up and go near that chart, and
- 9 I'm going to ask you a couple preliminary questions first.
- This morning when you were talking you said that
- the audio signal, as reflected on Chart 2, goes into a dummy
- 12 load.
- 13 Could you explain to us what you mean by dummy
- 14 load in this context?
- 15 A Okay, what happens is this. You can't take a
- stereo, Mr. Aronowitz, and have it playing without a speaker
- on it. If you do that, you would blow up the output of your
- 18 amplifier eventually.
- What happened with this when the audio was not
- 20 switched, the transmitter seeing a 600 ohm load, it was
- 21 sitting on a 600 ohm dummy load resister so that it wouldn't
- 22 damage itself.
- 23 Q Could you try that in English, for non-engineers?
- I absolutely couldn't even follow that answer.
- THE WITNESS: Your Honor, did I make that clear?

- JUDGE STEINBERG: Did your engineer understand it?
- 2 MR. BRADSHAW: Yes, I did.
- JUDGE STEINBERG: Okay, explain it to Mr.
- 4 Aronowitz later.
  - 5 MR. BRADSHAW: Oh, okay.
  - 6 MR. ARONOWITZ: Well, how can I ask a question --
  - JUDGE STEINBERG: Well, okay, explain it to Mr.
  - 8 Aronowitz now.
  - 9 MR. ARONOWITZ: Thank you.
  - 10 (Pause.)
  - BY MR. ARONOWITZ;
  - 12 Q In the context that you explained the stereo, you
  - were preventing the stereo from blowing up, what function
  - was the dummy load performing in this set up?
  - 15 A It was creating a load for the audio output from
  - the microwave unit, so that instead of seeing a load into
  - 17 the transmitter, it saw an external load.
  - I will give you an example, Mr. Aronowitz. It's
  - 19 like you're taking your car and having it in neutral and
  - 20 flooring it, you would blow the engine up. There needs to
  - be a load, and that load should be pushing the car forward.
  - 22 What we are doing is keeping a load on the output audio
  - 23 section of the microwave unit so that it sees 600 ohms.
  - Q Well, forgive me.
  - 25 (Pause.)

- JUDGE STEINBERG: Can I use a simpler analogy, see
- 2 if you agree with this?
- 3 If you keep eating and eating and eating and
- 4 eating and eating and never getting rid of what you're
- 5 eating, you're going to blow up, right?
- THE WITNESS: That's a fair way of putting it.
- JUDGE STEINBERG: And the 600 ohm load is the
- 8 equivalent of getting rid of what you've been eating.
- 9 THE WITNESS: Dissipating the energy.
- JUDGE STEINBERG: You're dissipating the energy
- 11 instead of food.
- BY MR. ARONOWITZ;
- 0 But what does that mean? Is it --
- JUDGE STEINBERG: You've given it some place to
- 15 qo, is that correct?
- 16 THE WITNESS: Yes, Your Honor. Thank you.
- 17 BY MR. ARONOWITZ;
- 18 Q Moving from the food analogy, because I don't want
- 19 to go there, where would this dispersal go?
- 20 A Into a resister, into the dummy load.
- JUDGE STEINBERG: Think of the resister as a bath
- 22 room implement.
- MR. ARONOWITZ: Thank you.
- JUDGE STEINBERG: I'm sorry, but that's the way my
- 25 mind functions.

- 1 THE WITNESS: Actually, I agree with you, Your
- 2 Honor. That's a good way of putting it.
- JUDGE STEINBERG: I should tell you I function
- 4 that way all the time; not just during this hearing.
- 5 Let the record reflect humor.
- 6 (Pause.)
- 7 MR. ARONOWITZ: I've been advised to move on.
- BY MR. ARONOWITZ;
- 9 Q Is the primary use for that microwave path
- 10 telemetry?
- 11 A Yes.
- 12 Q Do you understand that to be in compliance with
- 13 the Commission's rules?
- 14 A Yes.
- 15 O Okay. And I think you testified earlier that the
- 16 microwave path is extremely reliable. In fact, I think you
- 17 said you ever saw them fail?
- 18 A Never.
- 19 Q If the path is so reliable and data takes up so
- 20 little space on the path, why not establish as a fail-safe
- 21 additional data paths within that frequency?
- 22 A What?
- 23 Q You have a data path. For some reason -- and it
- takes up one-half lane of the highway. You've got a 12-lane
- 25 highway. Why not move another data path or a series of data

- 1 paths along that highway so that if one goes down it could
- 2 revert to another?
- A Mr. Aronowitz, with all due respect, that's the
- 4 most ridiculous question I've never heard in my life.
- 5 JUDGE STEINBERG: Well --
- THE WITNESS: I mean, it just doesn't make any
- 7 sense. It just doesn't make --
- BY MR. ARONOWITZ;
- 9 Q Why does it not make sense?
- Is it impossible to have multiple data paths along
- 11 a microwave?
- 12 A I have never in my entire life of 25 years of
- doing this ever seen that; even heard of anyone discussing
- 14 doing that.
- 15 Q Well, have you seen anybody configure a data
- 16 path/audio path like this?
- 17 A Yes.
- 18 Q Okay. Are you saying it's impossible to put other
- 19 data paths along there?
- 20 A Nothing is impossible, Mr. Aronowitz.
- 21 Q So you could put other data paths along there?
- 22 A That is correct.
- 23 Q So, in other words, to fail-safe a data path, you
- 24 could put another data path?
- 25 A You have to realize something, Mr. Aronowitz. The

- TC-8 is generating the data itself, and generates its own
- 2 little 67 kilohertz subcarrier is what it does. So you
- 3 recall can't do that unless you had another set of remote
- 4 controls. And, quite frankly, I don't have the money for a
- 5 second set of remote controls.
- So what you are asking to do does not create
- 7 another data path. You're asking for me to go out and buy
- 8 another set of TC-8 remote controls.
- JUDGE STEINBERG: So each TC-8 -- each TC-8 remote
- 10 control only -- is only capable of functioning on one data
- 11 path?
- 12 THE WITNESS: Exactly.
- JUDGE STEINBERG: No matter how much data is put
- on that path? Does that make any sense?
- 15 THE WITNESS: No.
- JUDGE STEINBERG: Okay. Whatever data is coming,
- 17 whatever data is going between the TC-8 units -- I will
- 18 withdraw that because that doesn't make sense either.
- 19 (Pause.)
- 20 JUDGE STEINBERG: I would also ask the witness not
- 21 to characterize Mr. Aronowitz's questions.
- 22 THE WITNESS: I apologize.
- JUDGE STEINBERG: Just answer them. And if you
- 24 can't answer them, say you can't answer them because either
- you don't understand it or the premise is faulty.

- 1 THE WITNESS: Yes.
- JUDGE STEINBERG: But I don't want this to
- 3 regenerate --
- 4 THE WITNESS: I apologize, Your Honor. I
- 5 shouldn't have done that.
- BY MR. ARONOWITZ;
- 7 O Does the telemetry path go through the microwave?
- 8 Is it correct that it doesn't go through the TC-8 remote
- 9 units?
- 10 A I apologize. I don't understand the question.
- 11 Q Well, if I understood you correctly, and as you
- 12 pointed out, I don't.
- 13 A Well, make this simple.
- 14 Q Well, wait, no, no, don't make it simple. Let me
- ask my question. Please lt me ask my question before you
- 16 answer.
- Did you just say that to do increase -- to
- increase the amount of data paths you would have to increase
- 19 the amount of TC-8 units?
- You just said that, didn't you?
- 21 A Yes.
- Q Okay. The data path flows on the microwave.
- 23 A Let me explain something to you, and I didn't want
- it to go this point because we're going down the road to
- 25 nowhere, but I will explain it to you.

- 1 Q Just like the dummy load.
- 2 A You have 100 -- we used 12 lanes before, Your
- 3 Honor. Let's make it even simpler. You have 100 lanes.
- 4 Now, there is a reason for this. You have 100 lanes. The
- first -- and this is real light now, okay? The first 15
- lanes are the audio, zero to 15 kilohertz audio response.
- 7 That's your first 15 lanes.
- Now, all the other lanes are blank, all right.
- 9 You have a lane number 67, as in 67 kilohertz. The remote
- 10 control unit generates a subcarrier at 67 kilohertz. You
- 11 hook the 67 -- and this generates inside the TC-8 remote
- 12 control. The 67 kilohertz gets piggy backed onto the
- microwave unit, generates its own data path at 67 kilohertz,
- 14 and is picked up in Fort Lee.
- 15 What you are saying to me is, Mr. Turro, add more
- paths. Well, to add more paths, you would have to add more
- 17 remote control units because the remote control unit itself
- is what generates the path.
- 19 JUDGE STEINBERG: So that if you wanted to add an
- 20 alternate data path, and you could add a TC-8 unit that was
- 21 transmitting the data path on a different lane in the
- 22 highway?
- THE WITNESS: Ninety-two kilohertz would be the
- 24 next road they would use.
- JUDGE STEINBERG: Okay, so you could by doing it

- that way have alternate data paths?
- THE WITNESS: Yes.
- JUDGE STEINBERG: So that an interruption in one,
- 4 let's say an interruption in 67 would not necessarily result
- 5 in an interruption in 92?
- 6 THE WITNESS: Right. Now -- yes.
- 7 MR. ARONOWITZ: All right.
- 8 THE WITNESS: Mr. Aronowitz, let me apologize for
- 9 what I said before. I shouldn't have done that. I
- 10 apologize. I have a raging headache. That's part of the
- 11 problem right now.
- JUDGE STEINBERG: Want to go off the record?
- 13 (Whereupon, a recess was taken.)
- JUDGE STEINBERG: Let's go back on the record.
- 15 MR. ARONOWITZ: Believe it or not, I'm working my
- 16 way through almost -- we're almost there.
- JUDGE STEINBERG: Okay.
- MR. ARONOWITZ: Are we on the record?
- 19 JUDGE STEINBERG: Yes.
- BY MR. ARONOWITZ;
- Q Okay, Mr. Turro, you say that the telemetry, in
- 22 other words, if the data path were to go out, the fail-safe
- is that the Fort Lee translator will rebroadcast the
- 24 microwave audio signal it receives from Dumont over the
- 25 audio path; is that correct?